



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,046	05/09/2006	Minerva M. Yeung	P17841	6276
59796 7590 03/05/2010 INTEL CORPORATION c/o CPA Global P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER STONE, ROBERT M	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 03/05/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/579,046

**Applicant(s)**

YEUNG ET AL.

**Examiner**

Robert M. Stone

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-7, 9, 11-16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by *Blume* (US 2004/0021648).

As to **claim 1**, *Blume* (Figs. 1-8b) discloses a method of associating a selected object on any pre-existing printed material to a valid response provided by a computer system comprising (book enhancing system providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via an electronic pen [abstract, 0002, 0010, 0025]):

determining a position of an electronic pen on a page of the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]), wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

transmitting the position to the computer system (output device 18 is the computer system which receives the XY location data corresponding to the point of contact of the electronic pen with the printed material [0029, 0032, 0041]);

correlating the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system (provides audio/video feedback corresponding to the selected location on the printed material [0002, 0010, 0025, 0029] as well as signaling the computer system to perform actions corresponding to buttons pressed on the pen and/or position of the pen [0033-0034]).

As to **claim 7**, *Blume* (Figs. 1-8b) discloses an article comprising:

a storage medium having a plurality of machine accessible instructions (computer system memory houses instructions for interpreting the location signals of a pen and interacting accordingly [0042, 0043]), wherein when the instructions are executed by a processor, the instructions provide for associating

a selected object on any pre-existing printed material to a valid response provided by a computer system (signaling instructions of the electronic pen 16,16a are interpreted by processor in unit 18 providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via the electronic pen [abstract, 0002, 0010, 0025]) by determining a position of an electronic pen on a page of the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]) wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

transmitting the position to the computer system (output device 18 is the computer system which receives the XY location data corresponding to the point of contact of the electronic pen with the printed material [0029, 0032, 0041]);

correlating the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system (provides audio/video feedback corresponding to the selected location on the printed material [0002, 0010, 0025, 0029] as well as signaling the computer system to performs actions corresponding to buttons pressed on the pen and/or position of the pen [0033-0034]).

As to **claim 12**, *Blume* (Figs. 1-8b) discloses a system for associating a selected object on any pre-existing printed material to a valid response provided by a computer system (book enhancing system providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via an electronic pen [abstract, 0002, 0010, 0025]) comprising:

a pointing device to determine a position on the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]) wherein the pre-existing printed material has not been modified for use with the computer system and the pointing device (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

a communicating device to transmit the position to the computer system (output device 18 is the computer system which receives the XY location data

corresponding to the point of contact of the electronic pen with the printed material via a wireless or wired method [0029, 0032-0033, 0041]);

a player component to correlate the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback via speakers and/or display [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

to provide a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content, and performing an action by the computer system (provides audio/video feedback corresponding to the selected location on the printed material [0002, 0010, 0025, 0029] as well as signaling the computer system to perform actions corresponding to buttons pressed on the pen and/or position of the pen [0033-0034]).

As to **claims 3 and 9**, *Blume* discloses wherein correlating the position comprises searching a printed material database, the printed material database comprising positional information of objects on the pages (detected contact position is compared to a database of location specific functions in order to

determine which specific feedback is desired for that contact location [0029, 0041-0043, 0046, 0049]).

As to **claims 5, 11, and 18**, *Blume* discloses wherein performing the action comprises at least one of adjusting volume of a speaker, adjusting brightness of a computer monitor, sending commands to an input/output (I/O) port, and powering off the computer system (sends signals corresponding to functional commands to the I/O port of the computer system via wired or wireless connection [0029, 0032-0034, 0036, 0041]).

As to **claims 6 and 16**, *Blume* (Fig. 1) discloses wherein the pre-existing printed material comprises a traditional paper book [0002, 0008, 0025].

As to **claim 13**, *Blume* (Figs. 1-4) discloses wherein the pointing device comprises an electronic pen (pen 16, 16a).

As to **claim 14**, *Blume* further discloses a holder structure to hold the pre-existing printed material in a fixed relationship to the pointing device (alignment guides 27 or a frame 90 is used to keep the book in a fixed position [0038-0040]).

As to **claim 15**, *Blume* discloses a multimedia database to store digital multimedia content, a printed material content database to store positional information about objects on the pages and linkage information between the objects and at least one of the multimedia contents and actions, and an action library to store directives for actions to be performed on the system (database of audio/video responses and location specific functions is searched in order to



determine which specific feedback is desired for that contact location [0029, 0041-0043, 0046, 0049]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Blume* (US 2004/0021648) in view of *Wood* (US 6,414,673).

*Blume* discloses determining the position of an electronic pen situated near the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]).

*Blume* does not expressly disclose determining position using ultrasound signal timing information.

*Wood* discloses a method for ultrasound signal timing information along with ultrasound sensors near a moving pen on a material being printed (Col. 13 Ln. 14 – 22; Figs. 9 & 17).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have used ultrasound for position detection as taught by

*Wood* in the book enhancing system of *Blume*. The suggestion/motivation would have been to increase accuracy for the position of the moving pen and also to provide "a means for communicating supplementary information between a transmitter pen and external receivers..." [col. 2 Ln. 59 – 63].

5. Claims 4, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Blume* (US 2004/0021648) in view of *Amano* (US 2004/0119696).

*Blume* discloses an electronic book enhancing system for interaction with pre-existing printed material providing additional entertainment, learning, and other features including foreign language support and translation ([0007,0051]).

*Blume* does not expressly disclose a language selection feature to be used for subsequent responses.

*Amano* discloses a language selection feature use for responses for the input of the user on figs. 13 & 14 ([0048 – 0052]).

At the time of invention, it would have been obvious for one of ordinary skill in the art to have provided a language selection as taught by *Amano* in the book enhancing system of *Blume*. The suggestion/motivation would have been to improve the learning experience of all users with a different cultural/lingual background [0051].

### ***Response to Arguments***

6. Although Applicant's arguments filed 7 December 2009, with respect to amended independent claims 1, 7, and 12 were not found fully persuasive, the previous rejection

has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of *Blume*.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. *Ohara* (US 5,485,176) and *Kopp* (US 5,810,604) disclose electronic book systems which provide audio and/or visual feedback according to a location touched by the user.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Stone whose telephone number is (571)270-5310. The examiner can normally be reached on Monday-Friday 9 A.M. - 4:30 P.M. E.S.T. (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Stone/  
Examiner, Art Unit 2629

/Chanh Nguyen/  
Supervisory Patent Examiner, Art  
Unit 2629